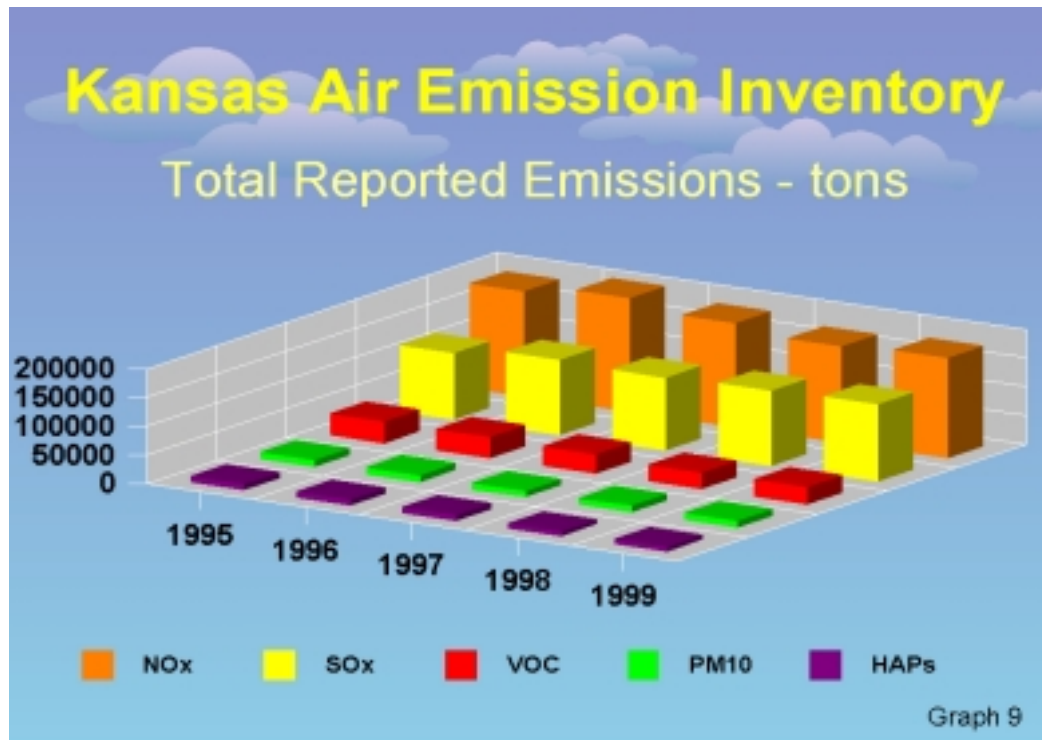


Emission Inventory

This 2000 Emission Inventory has been prepared by the Bureau of Air and Radiation to summarize the results of the calendar year 2000 Kansas point source emission survey. An emission inventory is a summary of air pollutant emissions covering a geographic area for a specific time period. The Bureau annually collects new information regarding the quantities of air pollutants emitted from sources in the state. The inventory is conducted by sending out surveys to facilities with Class I and Class II permits. The surveys for the preceding calendar year are mailed to facilities in February with the forms due back to the Bureau by June 1.

Graph 9 shows the total reported emissions (in tons) across the state for the main pollutants from 1995 through 1999.

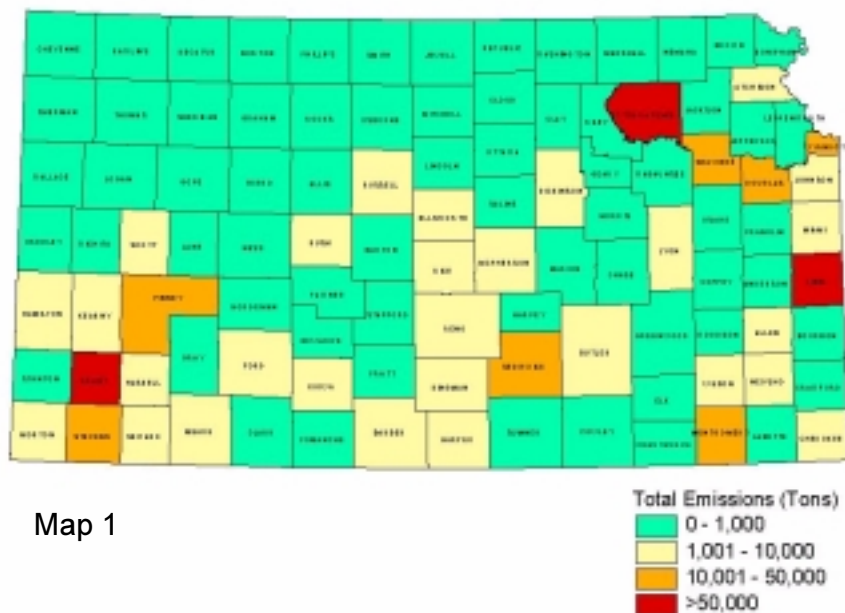
Information is collected for all six pollutants for which national ambient air quality standards have been established as well as hazardous air pollutants. Class I facilities are required to calculate their actual emissions using accepted emission factors or provide actual data from continuous emissions monitors. Class II facilities provide the Bureau with operating information that allows actual emissions to be calculated using emission factors. The inventory information is reviewed for quality assurance purposes and forwarded to the Environmental Protection Agency (EPA). The EPA combines the point source information with data for emissions from area, mobile and natural sources to create a complete emissions inventory for the state. This is combined with data for other states to create a national emissions inventory.



Point sources are facilities that process or handle raw materials or manufacture goods and emit air pollutants as a result. Examples of point sources include: chemical plants such as refineries; manufacturers; grain processing or storage; natural gas compressor stations; and printers. Point sources such as these whose emissions exceed certain thresholds are required to obtain a permit from the Department. Map number 1 shows the total point source emissions by county in 1999. Maps 2 and 3 show point source totals by county for both NO₂ and VOC's (pages 24 and 25).

Area source emissions are those from facilities or activities whose individual emissions do not qualify them as point sources, and are therefore not subject to permitting requirements. Examples of area

1999 Total Point Source Emissions

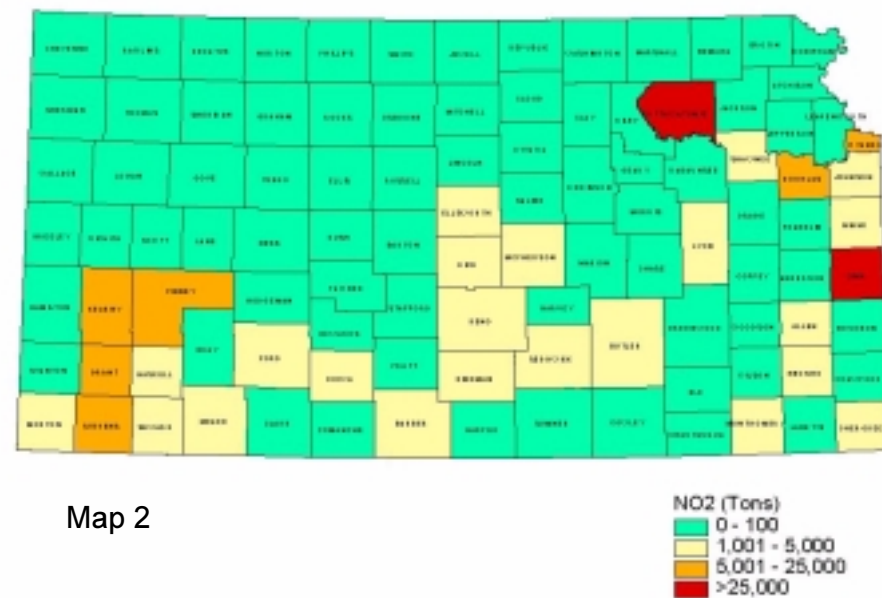


Map 1

source emissions include: household products; open burning; asphalt paving; painting and lawn and garden equipment. Mobile source emissions result from on-road use of vehicles such as automobiles, motorcycles and trucks. Off road vehicle emissions such as tractors, boats, and lawnmowers are considered area sources. Biogenic and geogenic emissions are those resulting from natural activities such as forests, agriculture and soil erosion.

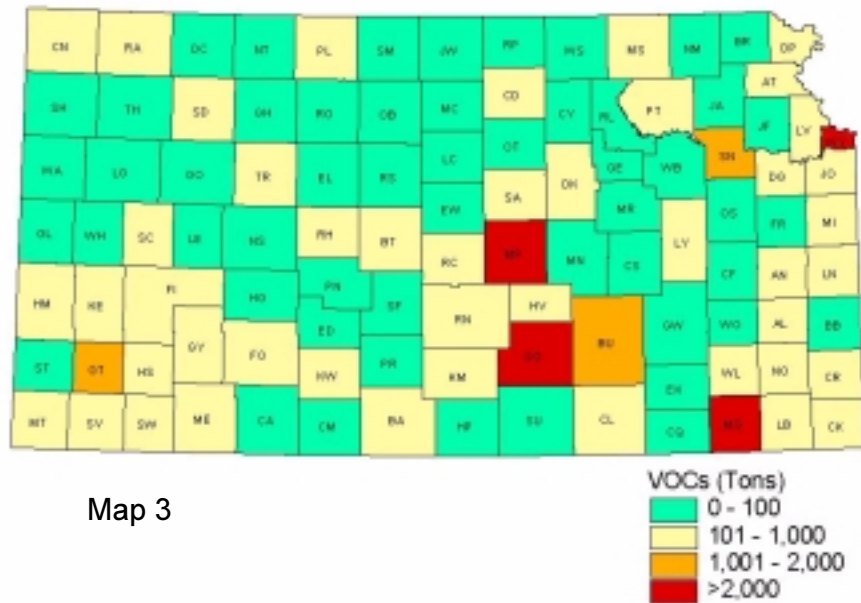
Emission inventories have multiple uses on both the federal and state level. Some examples follow:

- ✓ Preparation of state implementation plans for areas that are in nonattainment for a national ambient air quality standard
- ✓ Input into the air pollutant modeling process
- ✓ Input for health risk assessment studies or environmental impact assessments
- ✓ Basis for construction permit reviews
- ✓ Siting ambient air monitors

1999 Point Source NO₂ Emissions

Map 2

Point Source Volatile Organic Compounds (VOCs) Emissions for 1999



Map 3

- ✓ Assessing the effectiveness of air pollution control policy
- ✓ Basis for emission fees

The Bureau of Air and Radiation has traditionally conducted the point source portion of the emissions inventory and relied upon EPA to complete the area, mobile and natural source components. The Bureau is increasingly taking a more active role in reviewing the data prepared by EPA and developing our own data for those categories where our local knowledge can provide a better quality product. The importance of de-

veloping the best inventory possible is driven home by the increasing use of inventory data in regional air pollutant modeling.

In 1993, the Kansas emission inventory program began collecting emission fees. These emission fees are collected to support air program activities as provided for in the Clean Air Act Amendments. An eighteen dollar per ton emission fee was established by the bureau for 1993 air emissions and twenty dollars a ton for 1994 air emissions. In 1995 the fee was reduced to fifteen dollars per ton and remained at fifteen dollars through 1996. In 1997 the fee was again reduced to thirteen dollars per ton and will remain at thirteen dollars through emission year 2000.



What Can I Do?

Here's how you can help protect clean air in Kansas.

At Home.....

- Use a charcoal chimney instead of charcoal lighter fluid.
- Consider purchasing an electrical mower, or push mower if your lawn is small.
- If you use a gas mower, keep it tuned and wait until evening to mow your lawn.
- Use water-based paints rather than oil-based.
- Limit use of pesticides, paint thinners, solvents and petroleum products.
- Keep solvents and petroleum products tightly capped.